

June 19, 2020

Wake County
Wake County Environmental Services
336 Fayetteville Street
Raleigh, North Carolina 27062

RE: **The Point – East Young Street**
 Case Number: SUP-18-09
 Response to 1st Preliminary Subdivision Plan Review Comments
 AWH-19000

The following are the response comments for the above-mentioned project. Our response comments are in **bold**.

WATER QUALITY DIVISION

Barney Blackburn 919. 418. 3791

2. One copy of the Municipal Stormwater Tool (Site Data Sheet, Drainage Area Sheets, Site Summary Sheet, BMP Sheets, and BMP Summary sheet). The design tool is located at:
<http://www.wakegov.com/water/stormwater/management/program/Pages/default.aspx> Suggest making modifications in the Municipal tool to minimize the number of red cells in the “Post BMP” cells in “BMP Summary” and “DIA” worksheets.
McAdams Response: This tool has been found and entry begun though do to the potential for comments and design constraints that need to be further vetted this tool has not been completed such that final information will be imported toward resolution of design considerations.
5. Copy of the Wake County Soil Survey map with delineated project limits from 1970 manuscript.
McAdams Response: This has been added to the submittal package.
6. Proposed Site Plan:
 - c. Delineation of all existing and proposed impervious surfaces: roads, well lots, recreation sites, single family residences, etc. (consistent with Municipal SW Tool inputs). Include all impervious surface areas (streets, lots, sidewalks, parking areas, etc.) in Site Data table on cover sheet of plan set per SW Hybrid Tool data.
McAdams Response: This has been updated and added.
 - e. Proposed drainage easement and widths (in feet). Please provide for all ditches and pipe outlets (20ft).
McAdams Response: All easements have been added and labeled.

- f. Location and type of all proposed stormwater management structures (grass swale, wet/dry detention basin, filtering/infiltration basin, bioretention, etc.). Include type of SCM for each SCM shown in plan set.

McAdams Response: All SCMs are currently designed as wet ponds, and have been labeled accordingly in the plan set.

- g. Proposed easement access lanes and sediment disposal areas for future maintenance of stormwater management facilities. Please provide a minimum of 10 ft. of access easement from the toe of embankment for each SCM.

McAdams Response: Access easements have been added and labeled. Sediment disposal will be taken care of by a contracted SCM or pond maintenance company.

7. Stormwater Review Required - All residential subdivision development must submit a plan to comply with the applicable municipalities' stormwater ordinance. Office, institutional, commercial or industrial development that disturbs greater than 20,000 square feet is required to comply with the stormwater management regulations. Development and redevelopment that disturb less than 20,000 square feet are not exempt if such activities are part of a larger common plan of development or sale, even though multiple, separate or distinct activities take place at different times on different schedules. Rolesville [7.5.1(E)], Wendell [Chapter 6.5(F)], Zebulon [Chapter 151.05]

McAdams Response: Noted, plan is compliant and is provided.

8. Stormwater Permit – is required for all development and redevelopment unless exempt pursuant to the Code of Ordinances. A permit may only be issued subsequent to a properly submitted, reviewed and approved stormwater management plan and permit application. Rolesville 7.5.1(E)(3)], Wendell [Chapter 6.5(F)(3)], Zebulon [Chapter 151.21(A)] Note: A permit may not be required if there are no post-construction requirements (i.e. SCMs).

McAdams Response: Noted.

9. SCMs – For projects requiring stormwater treatment for quality and/or quantity control the applicant must:
1) comply with the NC BMP Manual Rolesville [7.5.1(G)], Wendell [6.5(H)], Zebulon [151.07]

McAdams Response: Noted.

- 2) as well as Completion of Improvements and Maintenance, prior to issuance of a certificate of compliance or occupancy. Rolesville [7.5.5], Wendell [Chapter 6.5(O)], Zebulon [Chapter 151.50 – 151.56]

McAdams Response: Noted.

10. Standards Based on Project Density- In accordance with the definitions, projects are identified as Ultra Low-Density (15% or less Built-Upon Area, referred to as BUA, and less than one dwelling unit per acre), Low-Density (more than 15% BUA and no more than 24% BUA), and High-Density (24% or more BUA). Rolesville [7.5.4], Wendell [Chapter 6.5(M)], Zebulon [Chapter 151.35]

McAdams Response: Noted – this project is High-Density.

b. Standards for High-Density Projects:

- Measures shall control and treat runoff from the first inch of rain. Runoff volume drawdown time shall be a minimum of 48 hours, but not more than 120 hours.
- Structural measures shall be designed to have a minimum of 85 % average annual removal for Total Suspended Solids (TSS)
- Permanent SCMs (Stormwater Control Measures) are to be designed in accordance with and as specified in the North Carolina Department of Environmental Quality's Design Manual.
- No net increase in peak flow leaving the site from the pre -development conditions for the 1 yr-24hr storm. Runoff volume drawdown time shall be a minimum of 48 hours, but not more than 120 hours.
- Location of development and redevelopment outside Riparian Buffer and Flood Protection Zones
Wendell Only: Nitrogen export limited to 3.6 pounds per acre per year unless project achieves classification as an LID Project.

Rolesville [7.5.4(A)(4)], Wendell [6.5(M)(4)], Zebulon [151.35(D)]

McAdams Response: Design standards are noted.

c. General Standards:

- Downstream Impact Analysis – DIA must be performed in accordance with the “10% rule”, and a copy provided with the application.

Rolesville [7.5.4(B)(1)], Wendell [6.5(N)(1)], Zebulon [151.36(A)]

McAdams Response: 10-year detention is being met at all Points of Analysis (POAs) leaving the site; therefore, there is no increased flow and consequently no adverse impact in the 10-yr storm as is required.

11. Erosion Control: This project will require a Land Disturbance Permit if it involves greater than one acre of disturbance. Adopting by reference the Wake County Soil Erosion and Sedimentation Control Ordinance. See website for details.

McAdams Response: Noted.

12. Due to the location of this project, it should be noted that a rule to protect and maintain existing buffers along watercourses in the Neuse River Basin became effective on July 22, 1997. The Neuse River Riparian Area Protection and Maintenance Rule (15A NCAC 2B.0233) applies to all perennial and intermittent streams, lakes, ponds and estuaries in the Neuse River Basin with forest vegetation on the adjacent land or “riparian area”.

McAdams Response: Noted.

13. There is a lot of steep topography, rock layer close to the ground and sandy material in this area. Suggest accounting for these conditions with erosion and sediment control design. There may need to be additional

surface ESC measures considered such as rock check dams, wattle barriers in lieu of silt fence, creative porous baffles in sediment basins where steel posts cannot be driven into rock material at bottom of basin.

McAdams Response: Noted, geotechnical engineer will be evaluating site to determine any potential areas of concern.

Consideration of this response is greatly appreciated. If you should have any questions or require additional information, please do not hesitate to contact me at 919. 361. 5000.

Sincerely,
MCADAMS

Daniel Wiebke
Project Manager, Water Resources